

STRATEGY I: Create a Work Planning Center to Leverage Resources and Manage Processes	
BEST PRACTICE INDUSTRY	SUMMARY
<ul style="list-style-type: none"> World Class Insurance Company 	<p><i>This summary presents best practices used for call center staffing and organizational budgeting.</i></p> <p>Staffing</p> <ul style="list-style-type: none"> Manages workload, but HR manages staffing - usually at an administrative role, but is heavily involved in decision-making for executive management positions. Forecasting Call center has a clear picture of the workload volume by phone. Managers use this information to schedule by the half-hour how many representatives they need to cover the number of estimated calls. The call center has a technical manager who schedules the representatives and functional manager who manages the representatives. Develops a 5-year, flexible staffing plan, and also trend analysis by office. Develops a forecast and profile based on business volume forecasts, manpower positions, workload volumes, budgets, operational measures, expenses, and revenues Uses regression analysis to merge its 2 workload measures into workload measurement and tracking data. The information is then tied to financial information for budgeting purposes. Manpower resource analysis is completed every year by the managers of each division that follows a specific template At any point, data can be extracted to observe the workload volume of a representative or division at this company. Inputs and pending work are reviewed by management or on an as needed basis Outputs are captured and reported monthly to identify the status of workload by activity/function for each division and any inefficiencies that exist Made up of a manpower team and 2-process review teams. Its role is to be management consultants, provide checks and balances, act as a catalyst for change, and as a manpower resource bookkeeper. Provides business process reviews, organizational structure changes, facilitation, manpower requirements modeling, manpower change processing, special studies.

<ul style="list-style-type: none"> World Class Insurance Company 	<p>Budgeting</p> <ul style="list-style-type: none"> Planning Budget Forecasts (PBF) are developed for 2-year increments. Prior to the initial budget estimates, the Executive Council gives each division a high level objective to follow including an all-inclusive dollar ceiling. Budgets are reviewed and approved at an Operational Planning Conference. The dollar ceiling assigns each expense to a portion of the total dollar amount (i.e., x% will be spent on staffing). If a division proposes to increase the manpower by 10% they should also have a 10% increase in volume or profit estimate.
<ul style="list-style-type: none"> Large Government Contractor 	<p><i>This best practices summary addresses issues of staffing management and budgeting.</i></p> <p>Staffing</p> <ul style="list-style-type: none"> Organizes workload according to work packages or projects, and includes the amount of resources necessary to complete the job. Outputs are deliverables specified in contracts and vary by project. Each project is assigned a project code that tracks employee hours, expenses incurred, and other project costs using a formula for assigning a time and cost value to workload categories. Councils/Boards are common management technique; consists of high level executives representing each part of the organization (Resource Board, Process Improvement Board, Leadership Board) <ul style="list-style-type: none"> Resource Board: makes staffing decisions by consensus and projects future needs on a monthly basis; use historical project information to determine staffing needs in 6-9 month time frames; works as a team to match surpluses in one area with needed requirements in another. Boards allow front-line managers to concentrate on performance instead of hunting for his/her own staff. Boards are established with responsible individuals from each organization that then allocates budgets or resources that were previously unassigned; the board collectively determine budgets, resulting in fewer complaints, and a bigger incentive to operate within allocated budgets. Boards are a vehicle for including employees in decision-making for the organization. MIS tools, future trends in the economy, and historical data are used to forecast staffing needs. Use historic project information and determine the number of hours different tasks require. Estimated hours are compared with man-hours available and additional employees are hired accordingly. Sub-contractors are used when temporary spaces need to be filled and there is not enough pending work to make a case for an additional full-time worker. <p>Budgeting</p> <ul style="list-style-type: none"> Budget office executes the budget for each project. Continuously (re)prioritizes and plans by establishing a series of gates <p>Each function/project receives a budget and is encouraged to save money by re-justifying budget spending as it is consumed.</p>
<ul style="list-style-type: none"> Large Government Service Provider 	<p>Background</p> <ul style="list-style-type: none"> The ODM is in charge of the overall management of the Division of Operational Resources (DOOR)

<ul style="list-style-type: none"> Office of Data Management (ODM) 	<p>system and gross productivity and work measurement reports that are generated from the DOOR system.</p> <ul style="list-style-type: none"> “Umbrella” offices includes budget, performance management, finance and planning staff, which are support offices for the 5 business lines integrated under the agency <p><i>This best practices illustrates methods of workload management and team formation and responsibilities.</i></p> <ul style="list-style-type: none"> Service Delivery Networks (SDN): new initiative to encourage the sharing of workloads and help alleviate staffing inaccuracies nationwide. 4-9 regional offices are grouped together to form these networks. SDNs create incentive to share work amongst employees and creates a culture that will better promote the mission of the agency as opposed to individual offices. Team leaders (facilitators) of the SDN and other regional office directors oversee the sharing of workloads. Decisions to transfer work between regional offices is a team decision Recognition has been placed on team levels rather than individual levels or regional levels. Self-Directed work teams is their ultimate goal.
<ul style="list-style-type: none"> Manufacturing Company A: 	<p><i>This best practices includes call center structuring, team development and staffing management</i></p> <p>Team Development</p> <ul style="list-style-type: none"> Business is broken into 2 segments: Ongoing Maintenance (OGM) and Non-Ongoing Maintenance (Non-OGM). There is an attempt to plan for OGM in detail using past work measurement data and forecasting, but Non-OGM planning is based on trends. There is no work control center, but the organization is a team-based organization with one manager for every team, and is somewhat centralized. Each team typically consists of several workgroups that work together. Each workgroup contains 1-8 representatives. <p>Call Center Staffing</p> <ul style="list-style-type: none"> There is a call center that fields all customer requests through a 1-800 number. Representatives there attempt to assist the customers who are calling with a problem with scripts. Scripts contain frequently asked questions and their solutions. If a representative is unable to assist the customer by phone, a customer service representative is dispatched. Capturing time it takes to complete service and cost value for doing so is done through trend analysis and includes any scheduled improvements or changes to a machine. Most analysis is based on calls per million produced. Takes a proactive approach to head-off calls to the center: managers ask service teams to identify the top 10-15 poor performing machines in their area, and they visit the customers using the machines to better understand what the issues are with that particular machine. Looks at actual workload volumes from the previous year for each machine and estimates work volumes for the next year. Workload measurement data identifies workload volumes and the average time and cost to complete service.
<ul style="list-style-type: none"> Global Best Practices: Health Care Industry 	<p><i>This best practice illustrates the methods and benefits of appropriate scheduling techniques.</i></p> <p>Methods:</p>

	<ul style="list-style-type: none"> Negotiate the use of block scheduling with physicians based on automated scheduling reports of utilization of scheduling blocks and/or potential volume that physicians can bring to the facility. Use schedulers who exercise excellent judgment in scheduling cases based on knowledge of clinical procedures, equipment requirements, past surgeon performance, and surgeon preferences and practices. Scheduler must understand the clinical procedures and know the equipment, so use a registered nurse as a scheduler because of the experience of the individual and because there is less time and expense to train a new clerical person. Educate the physician's office staff on what scheduling information, patient criteria and equipment requirements are needed to enable effective scheduling of the case. Implement a reporting process to inform the physicians of their utilization and efficiency Provide easy access to facilitate changes in the block scheduling if necessary <p>Benefits:</p> <ul style="list-style-type: none"> Accurate and efficient allocation of labor and equipment Minimize physician waiting time On-time starts typically 10% higher Improved decision making regarding block utilization and assignment because of better information. Better communication with the patient regarding information required on the day of surgery.
<ul style="list-style-type: none"> "Forecasting and the Continuous Replenishment Craze of the 1990's" by Kenneth Frasier-Sleyman Journal of Business Forecasting 	<p><i>This best practices case discussed the criteria for best in class for inventory control:</i></p> <ul style="list-style-type: none"> Build networks of regional warehouses to handle customer needs. Making forecasting useful and relevant: Use Praxis Forecasting, which defines skill and discipline required to develop weekly sales forecasts that satisfy the demands of distribution network. Emphasize managerial skills over technical skills, with less concern for preciseness than if they produce satisfactory economic results.
<ul style="list-style-type: none"> Hewlett-Packard 	<ul style="list-style-type: none"> Established a system called Interlock that calls for regular communication across the company's three core businesses. Monthly telephone conferences among key business unit executives focus on critical issues and ways to coordinate and reap advantages from common manufacturing resources, technological platforms, and distribution channels
<ul style="list-style-type: none"> Du Pont 	<ul style="list-style-type: none"> A single manager has been given oversight responsibilities for all of the company's pilot plants, which generally are in use about half the time. Ideally, a single manager will facilitate better scheduling of projects that use the pilot plants.
<ul style="list-style-type: none"> Rockwell International (Manufactures aerospace telecommunications equipment) 	<ul style="list-style-type: none"> Adheres to a principle of "horizontal synergy" through which autonomous business units share ideas and resources. Enabled organization to draw on its expertise in the defense industry in designing products for the commercial market.
<ul style="list-style-type: none"> National Breakdown 	<ul style="list-style-type: none"> Establishes dedicated inquiry/response center(s) with the capability to share information and react quickly

Commercial Recovery Ltd. (UK)	(the breakdown control centers are staffed 24 hours a day). <ul style="list-style-type: none"> Monitors inquiries and use the information to improve business performance.
<ul style="list-style-type: none"> Chaparral Steel 	<ul style="list-style-type: none"> Encourages employees to participate in cross-functional project teams. Employees take responsibility for daily operations, chipping in (informally) when solutions are needed.
<ul style="list-style-type: none"> Large Government Contractor 	<ul style="list-style-type: none"> Teams focusing on fiber optics and surface mount technology were created with the goal of producing perfect products on schedule and within budget. Team members learned to view one another as resources. Broke jobs into tasks and skills rather than job descriptions.
<ul style="list-style-type: none"> Department of Energy: Maintenance Importance Generator Program 	<ul style="list-style-type: none"> Combines elements of federal and state policy, plant policy, physical plant particulars, maintenance personnel data, customer organization expertise, and maintenance expertise to develop a numeric value for each work order and establish priorities Uses risk ranking data in an expert system to accomplish the ranking
<ul style="list-style-type: none"> Texas Instruments 	<p><i>This best practice focused on organizational structure, particularly one focused on customers.</i></p> <ul style="list-style-type: none"> Structured an organizational framework in a pyramid according to product, process, and function in a hierarchy. Process is subordinated to product (to ensure customer focus) and is prior to function to counter the creation of barriers to high performing process flows. Functional organization forms the base to meet resource needs of the product and process organizations for ensuring compliance with regulatory authorities. Hierarchy is reinforced by supporting measurement.
<ul style="list-style-type: none"> Global Best Practices: Production (5.2.2) 	<p><i>This Arthur Andersen best practices focuses on the central theme of effective planning and scheduling to meet company goals and objectives through specific team formation and responsibilities.</i></p> <ul style="list-style-type: none"> <u>Supervisory committee</u>: advises analysis team on policy matters and makes people available when needed, reviews the plan for operational acceptability representing the viewpoints of sales, production, and finance <u>Analysis team</u>: involved in day-to-day activities of production planning and scheduling; investigates manufacturing and distribution processes, mapping out on paper how the processes work now and how they might work better in the future. <u>Production planning</u>: identifying the resources needed to produce a product and allocating these resources to produce the product at the best total cost <u>Production scheduling</u>: balances quantity of work among departments and work centers, keeps on-hand labor employed, and ensures that production keeps pace with product demand Objectives of planning and scheduling: <ul style="list-style-type: none"> reduce or eliminate lead time between customer demand and product delivery Scheduling responds to current demand and minimize output fluctuations Production planning is a longer term function that enables production to respond to future demand Provides critical decision making information to: <ul style="list-style-type: none"> Executive level managers, who compare planned production v. actual production Operational managers who schedule overtime and extra shifts

	<ul style="list-style-type: none"> • Inventory managers, who measure production against demand and stock levels • Purchasing managers, who need to know lead times to avoid stockouts and missed orders • Sales and marketing managers, who need to know if production is not meeting customer demand • Prerequisites for production planning and scheduling: <ul style="list-style-type: none"> • Records and reports (basic information, available materials and resources, historical records) • Manufacturing planning (product development, human resources and equipment needs) • Equipment loading • Sales forecasting • Purchasing • When Creating a production plan: <ul style="list-style-type: none"> • Allow for the time that it takes to adjust to changes in production rates and levels • Use daily and weekly plans to factor in holidays and vacation peaks • Avoid building overtime into the plan; reserve it as a means for dealing with the unexpected • Establish in advance the circumstances that justify a change in the production plan and change production plans only when these circumstances arise • Create a unique production plan for each major manufacturing facility • Write the production plan in simple, direct language to make it easy to use • Add sales and production figures to the plan as they become available for comparing actual figures with planned figures; analyze variance to refine planning assumptions • Operating schedules are linked to due dates and kept valid by rescheduling when due dates change. Production control involves scheduling dates by operations and reviewing jobs that are due to ship in the current and upcoming weeks, as well as those that are past due, to determine the problems causing the delays. A production schedule review report is sent to all people affected by production, including sales and marketing people, to let them know when jobs will be shipped • Scheduling rules: <ul style="list-style-type: none"> • First come first served – the oldest job is next in the queue • Value priority – preference is given to items with the highest dollar value • Critical machine – jobs that must go through critical machines with limited capacity are run first • Least processing time – the fastest, easiest jobs are completed first • Resource loading guidelines: <ul style="list-style-type: none"> • Determine the hours needed to perform each operation and hours needed to complete the entire job if no loading delays occur • Identify the earliest date available for scheduling each operation • Determine the possible completion date dictated by each operation by adding the hours needed to perform the operation onto the earliest date available. The operation with the latest completion date is the bottleneck • Schedule the bottleneck operation to begin on the earliest date possible
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	<ul style="list-style-type: none">• Schedule subsequent operations as early as possible, and schedule prior operations as late as possible.• Measure performance <p>Eight tips:</p> <ul style="list-style-type: none">• Gather clear statements of objectives and policies from management• Carefully prepare facts to present to management• Provide all related functions with the training and information needed to understand the current business environment and the overall production process• Know the activities of related groups and functions and their objectives in the process• Keep planning separate from and ahead of performance• Break large undertakings down into a number of small simple ones
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STRATEGY II: Adopt Organizational Competency-based Workforce Planning Strategies	
BEST PRACTICE INDUSTRY	SUMMARY
<ul style="list-style-type: none"> World Class Insurance Company 	<ul style="list-style-type: none"> HR attempts to keep jobs/descriptions the same or similar to alleviate the administrative burden of maintaining multiple job descriptions for similar work. If a position requires more than the basic skills, human resources work with the requesting manager to form a new position
<ul style="list-style-type: none"> Global Best Practices: Health Care Industry and Human Resources Management 	<p><i>The focus of this best practice is on cross-training and its benefits</i></p> <ul style="list-style-type: none"> Cross-train operating room nurses to be multiskilled in several procedures allows multitasking, for example, they can scrub as well as circulate in the rooms <p>Benefits:</p> <ul style="list-style-type: none"> Maximize staff Increased capabilities to respond to all situations Eliminates the potential for surgeons to request specific nurses on their cases Maximizes surgical staff's time and expedites room flow Allows for the ability to call in staff to fill in for missing staff members as necessary <p>Approaches:</p> <ul style="list-style-type: none"> Cross train the admitting nurse, preoperative nurses, post-anesthesia care unit nurses, and the post-operative nurses to be cross functional Consider rotating the staff through each function on a weekly or biweekly basis to build comfort and expertise in all aspects of care Cross train the surgical nursing staff to perform multiple specialties as well as scrub and circulate. Hospitals that have a hospital dedicated unit or main OR often share inservices across areas to maximize OR staff expertise.
<ul style="list-style-type: none"> Global Best Practices: Managing Workloads 	<p><i>This best practice focuses on cross-training staff, and the relevant benefits.</i></p> <ul style="list-style-type: none"> Cross-training meter readers and other field service employees to manage work loads efficiently <p>Benefits:</p> <ul style="list-style-type: none"> Allows utility to manage work loads more efficiently and effectively by enabling resource redeployment to and from the meter reading activity during busy and slow periods Enables meter readers and other utility employees to migrate between meter reading, collections, field services, or other utility positions, resulting in higher levels of employee satisfaction and reduced cost of recruiting and training outside hires. <p>Approaches:</p> <ul style="list-style-type: none"> Negotiate and adopt flexible job classifications in labor agreements Train meter readers to perform other utility tasks including collections, equipment tuning, service connection/disconnection and customer inquiry. Train other utility field services or customer services employees to perform the meter reading function

	<ul style="list-style-type: none"> Develop and implement performance incentive programs that support cross training objectives and enable employees to temporarily support other utility activities without penalizing their measured performance of their primary activity.
<ul style="list-style-type: none"> Pfizer Company 	<ul style="list-style-type: none"> Developed “competency models” for its treasury executives that call for more than basic finance skills. Knowledge building and knowledge sharing are considered critical for management as the company strives to create linkages across the organization
<ul style="list-style-type: none"> Harley Davidson, Inc. 	<p><i>This best practice illustrates the use of learning to support existing core competencies and create new ones.</i></p> <ul style="list-style-type: none"> A new operating agreement with 2 major labor unions focuses on making Harley-Davidson a high-performance workplace. Stresses education, offering employees 80 hours of training/year Emphasizes that workers possess what it calls its 3 competencies: interaction competencies for communication and team skills, execution competencies for solving problems and making decisions, and technical competencies for task operation and commitment.
<ul style="list-style-type: none"> Porsche 	<ul style="list-style-type: none"> Abandoned its traditional craftsmanship, which involved rendering parts to fit perfectly Funneled creative efforts into finding inventive ways to make manufacturing process move without interruption Founded own consulting group to sell its knowledge base of best practices and lessons learned to other German car manufacturers
<ul style="list-style-type: none"> Naval Avionics Center 	<ul style="list-style-type: none"> Designed a scheduling system based on specific organizational requirements including negotiating workload, replying to sponsor inquiries, and ensuring a fixed turnaround time to accommodate limited resources and work expedition. Workflow system provides weekly and monthly forecasts
<ul style="list-style-type: none"> NASA Kennedy Space Center 	<ul style="list-style-type: none"> Developed a system with 4 components that creates an automated process for managing consistent work instructions and related data, scheduling, planning, resource availability functions, work release and execution, historical reference
<ul style="list-style-type: none"> Harris Semiconductor 	<ul style="list-style-type: none"> Each team develops a skills matrix that accounts for the background and capabilities of each team member to achieve the team's overall goals. Team focus on major goals has produced substantial gains in product yields and reductions in cycle times
<ul style="list-style-type: none"> McDonnell Douglas Aerospace 	<p><i>This best practice shows the integration of a scheduling system into the manufacturing process.</i></p> <ul style="list-style-type: none"> Integrates manual and automatic shop floor processes with computer integrated planning, scheduling and control.

	<ul style="list-style-type: none"> • Schedules and tracks work using inputs from the planning system. The system supplies a package including text and graphics required accomplishing the assigned task. It automatically updates information using the latest instructions and collects an audit-ready, as built history. • System collects and provides online visibility of labor hours expended and produced. It is also used by management to report on cycle times, etc.
<ul style="list-style-type: none"> • Arthur Andersen's KnowledgeSpace: Definition of Competencies 	<p><i>This Arthur Andersen best practice focuses on organizational competencies. Organizational Competencies are the sum of all of the competencies employees possess. This sum determines the organization's ability to produce or provide products or services to meet or exceed client expectations.</i></p> <ul style="list-style-type: none"> • Team competencies are the competencies that must be possessed by a group of individuals responsible for producing or providing a product or service. Within the team, who must possess each competency is determined by the role played by that individual. The team should be comprised of individuals who possess and/or are able to develop the necessary competencies to provide or produce the product or service • Individual competencies are those competencies that must be possessed to be effective in a role or position within an organization. • The marketplace drives the business's vision, mission, goals, and strategies, which drive the products and services, which define organizational competencies, which drive team competencies, which drive individual competencies • All levels of competencies are driven by and directly linked to the business vision and mission, goals and objectives, and strategies of an organization • Competencies should be able to be observed and measured. They include at least 2 levels – overall competency, such as leadership, project management, etc., and the breakdown of the skills, knowledge, or attitudes that comprise that competency • Competency-based management (CBM) is a managerial approach that reduces complexity, adds capacity, and increases overall capability. It involves identifying the competencies that distinguish high performers from average performers. It condenses competencies from the complex web of roles, responsibilities, goals, skills, knowledge, and abilities that determine an employee's effectiveness. • That complex system of employee related areas operates within an even more complex system: the organization. Often, the only thread that ties together "people processes" is a manager's biases about what makes an employee successful. To an employee, what is the link between such elements as his/her performance evaluation, pay increase, training, job assignment, transfer, and promotion? It's the manager's perception of the employee. If that perception is accurate and articulated well, that's positive for the employee. But more often, the manager's perception is either inaccurate or incomplete. Or the employee does not understand it. Even when employees understand a manager's perception of success, other managers' perceptions may be different. That can make an employee's path through the career development maze hazardous, confusing and tricky. • The thinking is that employees are bound to be effective if they're assessed and trained properly and if their job responsibilities and skills are clearly written. But that requires a huge control center. Rigid job

	<p>descriptions are also counter to the reality of constant change within organizations and the need for greater flexibility and less hierarchy. Instead, organizations need broad roles that encourage fewer boundaries. Instead of narrow skills, employees should strive for broad skills that increase their flexibility and speed and that lessen the need for managers to coordinate work.</p>
<ul style="list-style-type: none"> Global Best Practices: Competencies: The Next Generation (8.2.2) 	<p><i>This Arthur Andersen best practice focuses on the identification and use of key competencies to help an organization succeed.</i></p> <ul style="list-style-type: none"> Competencies are key to enhancing those intangible factors such as the quality of the workforce, organizational knowledge, and customer loyalty, which are hallmarks of successful companies. The goal of most competency initiatives is “to produce the ideal profiles for a salesperson, supervisor, or some other type of employee”. Guidelines: <ul style="list-style-type: none"> Simplify models and make them more user-friendly by eliminating jargon and excessive detail Involve employees in the modeling process to infuse greater power and accountability throughout the company Start by identifying organizational competencies, then specific job competencies; give employees the necessary tools and training to define their own work competencies Increase the emphasis on the application of competencies and away from the analysis of them. Develop models that integrate descriptions of the work to be done with descriptions of how it should be done.

STRATEGY III: Utilize a Workload Management Tool that Meets NRR Business Needs	
BEST PRACTICE INDUSTRY	SUMMARY
<ul style="list-style-type: none"> World Class Insurance Company 	<ul style="list-style-type: none"> Uses automation (UNIX-based system) to track outputs, cycle-times, level of effort/output UNIX-based system captures inputs, outputs, and work in progress
<ul style="list-style-type: none"> Large Government Contractor 	<p><i>This best practice illustrates the use of various MIS tools to improve the efficiency of various organizational tasks.</i></p> <ul style="list-style-type: none"> Various Management Information Systems (MIS) are used to track costs; ATLAS system tracks time and attendance data; though information is inputted daily, the system posts information to the ledger once a week and the data is displayed aggregately by project the following Monday. Work in progress data can be obtained, but must be combined with the status of the deliverables or milestones for that project to understand precise status. Uses the People Utilization Report (PUR) and accounting and Management Information System (MIS) tools for tracking work measurement. Workload information is on-line, and is available for anyone needing the data at any time, and can be viewed by person, project and various hybrids of the information.
<ul style="list-style-type: none"> World Class Insurance Company 	<ul style="list-style-type: none"> Generates monthly (via its UNIX system) of customized metrics per division. Additional formats of data can be extracted on an as needed basis for analysis.
<ul style="list-style-type: none"> Large Government Services Provider 	<p><i>This best practices shows the use of MIS to do tracking of time and work.</i></p> <ul style="list-style-type: none"> Uses Division of Operational Resources (DOOR) System that is remotely operated on a mainframe computer. Receives all information from personnel and payroll system, and the Benefits Delivery Network (BDN). Measures end products, though it does capture process data As new claims are received, they are logged into the BDN System. Representatives manually assign claim numbers, and additional information is automatically assigned a 6-character code. Data is captured in “work measures” (detailed, manual information) and “gross productivity” (higher-level work unit data – end products) Tracks time it takes to process a claim, pending claims and time required to complete the claims from the date of receipt to date of resolution, but <i>does not track the “dead time”</i> as part of the work rate. Costs are directly retrieved from the data reported from DOOR. QA of the operations is linked to the data input to the DOOR System as well as quality reviews and quality assurance studies. <p>Inputs measured include:</p> <ul style="list-style-type: none"> Work rate standards (determined by doing periodic work sampling studies) are direct labor hours Human Resource PAID link:

	<ul style="list-style-type: none"> • Costs • Training hours • Direct labor hours (work count) • Standard hours (total work time at a specific station (minus training, leave, sick, etc.) • DOOR System reports are run in a specific sequence to allow report data from some reports to feed into other reports • Outputs measures tracked at agency: sub-end products, end products, hours • Reportable Work Units <p>Workload Indicators:</p> <ul style="list-style-type: none"> • Work in Progress: Work In Progress Process (WIPP) Subsystem was designed to assist management in identifying pending issues that required attention and provides information on all cases in a pending status. WIPP also identifies pending claims based on a suspense control date or on the age of the claim. • DOOR generates workload measurement reports called COIN DOOR reports. They are electronically distributed to and can be electronically accessed by each regional office. • Everyone at the agency, including field managers and staff in 5 business lines may download the reports from the system. • Report data can be reviewed and analyzed in report form or by selecting and extracting data by WID number using DOOR System On-Line Query. • COINDOOR data can also be reviewed in Executive Information System (EIS) which presents performance measurement data in a graphical format. • EIS has a dynamic investigative application for analyzing strategic data from a variety of perspectives
<ul style="list-style-type: none"> • Manufacturing Company A 	<ul style="list-style-type: none"> • Customer service representatives use laptops to record all necessary workload data • Representatives fill out information sheets that record measurement data • Information is automatically forwarded to the Field Work Support System (FWSS) which calculates machine performance based on the information recorded • System records who is assigned to each call and who took the call • Measurement information is compiled and deposited into the Service Technical Performance Reporting (STPR) system • Inputs, outputs and work in progress are captured via FWSS • Work in progress can be accessed at any time from FWSS • Engineers who design and build the machines within the manufacturing organization perform time and motion studies on machines to identify how often service will be needed (on average every 5 or 6 years). Studies evaluate processes to ensure all activities during the servicing of the machines are being captured in the workload measurement process data • Systems were built in house, and are based on Visual Basic and Oracle databases. They did not look heavily at off the shelf products • After a representative “closes the call” or completes a service for a customer, the measurement data

	<p>deposited into FWSS is forwarded to the STPR system.</p> <ul style="list-style-type: none"> • Work measurement data is compiled in monthly reports by product or location and are available for all employees
<ul style="list-style-type: none"> • Global Best Practices: Health Care Industry 	<p><i>This best practice shows how to manage costs and performance daily utilizing a comprehensive computer system, and its benefits.</i></p> <ul style="list-style-type: none"> • The system includes scheduling, inventory control, charging, preference cards, physician and nurse credentialing, patient accounts, and statistical reporting. <p>Benefits:</p> <ul style="list-style-type: none"> • Faster, more informed management decisions • Modify physician behavior and better coordination • More accurately predict case length resulting in increased operating room utilization • More effectively negotiate contracts with managed care companies to maximize revenues • More effectively monitor departmental costs and productivity • More accurate billing of services provided • Identification of root causes of cancellations, delays and downtime • Integration of ADT and material management systems will facilitate information transfer • Director of Surgical Services along with an Information Systems specialist (outsourced or inhouse) develop an information systems plan that reflects the management reporting needs and integration of various systems. Identify information needs through discussion with the surgical team and physicians to determine the most efficacious way of obtaining critical data.
<ul style="list-style-type: none"> • Global Best Practices: Health Care Industry 	<p><i>This best practice shows the benefits of utilizing and automated scheduling system.</i></p> <ul style="list-style-type: none"> • This particular scheduling system was designed to have an associated output information to monitor operating room utilization, monitor requested case length against actual case length, evaluate utilization of block time, and coordinate equipment requirements. <p>Benefits:</p> <ul style="list-style-type: none"> • Ability to identify physicians who consistently overrun • Potential to add cases and thus increase revenues • Utilization of operating room is 10% higher (79% v. 69%) <p>Approaches:</p> <ul style="list-style-type: none"> • Identify user needs of the automated system • Compare and contrast external packages for their adaptability to the user needs identified • Review external supplier packages on the market and their adaptability to the unique situation (i.e., Surgiservice, ORSOS, RESCUE, Surgicenter software) • Compare the external packages to the potential inhouse package • Ensure system has the capability to supply the relevant performance measures • Ensure system has a good report writer • After selection of the package conduct training

	<ul style="list-style-type: none"> • Identify employees to be involved in training • Determine the reports to be utilized and customize those to the situation • Scheduler utilizes and evaluates information in the system and not just use the system to schedule cases • Scheduler receives reports daily • Perform planning to facilitate input of historical data
<ul style="list-style-type: none"> • Sears Roebuck & Co. (USA) 	<p><i>This best practice shows the outcomes and uses of taking a collaborative approach to developing an information system.</i></p> <p>Background: System is called Strategic Performance Reporting System (SPRS) that holds sales, inventory, and margin information</p> <ul style="list-style-type: none"> • Systems developers gather functional requirements from business users, design the system, document it, and then obtain approval from the business users prior to implementation. They are also incorporating feedback from the finance department. • New system provides a definitive response to each query • Management fully supports SPRS initiative with a “hands-on” approach early on. Several senior managers served on a steering committee that met weekly to oversee progress, prioritize projects, and resolve standoffs between business users and systems developers. • Uses information to be proactive and to increase “speed of knowledge” • Makes effective technology training immediately accessible • Professional trainers rather than IT employees were responsible for training they needed to train 2500 people on a new payroll application. • IT employees helped develop course content to help bridge the technical knowledge gap between IT engineers and professional trainers.
<ul style="list-style-type: none"> • Fidelity Investments 	<ul style="list-style-type: none"> • Puts user productivity at the forefront when choosing an IT solution • IT department employees are up-to-date not only on the rapidly changing product offerings and vendors who offer them, but also on the current needs of the users in the company. They are the experts on how the technology and the users work together, and their knowledge is vital to an informed IT investment decision
<ul style="list-style-type: none"> • Wal-Mart 	<p><i>This best practice shows the use of an automated help desk, and its overall benefits.</i></p> <ul style="list-style-type: none"> • Built an internal help desk that anticipated the needs and expectations of users • Automated its help desk to save money and improve the productivity of help desk technicians • Cut 10 minutes off every downtime incident, which translates into very significant time, cost and quality improvement. • Technicians use handheld computing devices, instead of pen and paper to handle all administrative tasks, from picking up work orders from the central help desk to recording their support activities at the users’ desktop.
<ul style="list-style-type: none"> • Johns Hopkins Medicine 	<p><i>This best practice focuses on the skills needed for a functional help desk.</i></p> <ul style="list-style-type: none"> • Makes customer service the primary objective of the help desk

	<ul style="list-style-type: none"> Hires help desk technicians based on their attitude and interpersonal skills, not their technical abilities or experience. Considers it easier to teach technical skills rather than “soft” interpersonal skills.
<ul style="list-style-type: none"> Customer Services West 	<ul style="list-style-type: none"> Builds job enthusiasm among help desk employees to minimize burnout Help desk technicians work on the phone 6 hours a day and spend the other 2 hours working on special projects like Web page development. Use humor to combat the stress, installing punching bags or gavels for technicians to vent their frustration.
<ul style="list-style-type: none"> Autodesk, Inc. 	<ul style="list-style-type: none"> Help desk employs 12 people, who process about 100,000 support requests/year and serve 1400 users Won the 1998 Team Excellence Award from the Help Desk Institute
<ul style="list-style-type: none"> Global Best Practices: Manage Technical Environment 	<p><i>This Arthur Andersen best practice focuses on developing the company’s network around business objectives.</i></p> <ul style="list-style-type: none"> Network managers in companies that apply best practices configure and develop networks to optimally meet the needs of many business users. Only when business management clearly articulates and prioritizes their networking needs can network management provide optimally efficient and effective network solutions. Ensure that adequate, formal feedback mechanisms are in place <p>Includes:</p> <ul style="list-style-type: none"> Protect the integrity of the network Only appropriate personnel should be allowed to establish connections to corporate computers Additionally, all remote connections should be monitored for unusual activity Provide routine maintenance on all networks Focus on meeting users’ needs Establish a centralized point of contact for users Increased user involvement leads to higher user satisfaction and user productivity and overall system effectiveness Educate users on how to fully utilize the system
<ul style="list-style-type: none"> Global Best Practices: Technology 	<ul style="list-style-type: none"> Assess existing information technology systems that support critical business processes Conduct a company-wide risk assessment of existing systems Evaluate systems’ controls Create and maintain a common technology platform on workstations throughout the company
<ul style="list-style-type: none"> Dreamworks, SKG 	<ul style="list-style-type: none"> Designed an overall systems architecture that met primary business requirements First determined, or anticipated, the automation and business needs of each of the company’s nine units and then designed applications that are both specific to each unit and capable of being combined into one centralized system. Considered company’s growth rate, diversity of output, and need for flexibility
<ul style="list-style-type: none"> Global Best Practices: Leverage Organizational Knowledge 	<p><i>This best practice shows the approaches to leverage groupware functionality to facilitate communication, collaboration, and coordination, and its benefits.</i></p> <p>Benefits:</p>

	<ul style="list-style-type: none"> • Democratizes employee population, thereby fully leveraging organizational experience • Enhances collaborative efforts and group productivity • Minimizes barriers of geography and time • Creates a repository for organizational knowledge • Links the organization to supplier and customers <p>Approaches:</p> <ul style="list-style-type: none"> • Create positive user awareness about groupware • Generate user commitment to groupware before deployment • Build user knowledge about groupware • Formally recognize and reward groupware use to make groupware use legitimate
<ul style="list-style-type: none"> • Mason & Hanger Corp. 	<ul style="list-style-type: none"> • Implemented a management information system which integrated all requirements for formalized business planning, scheduling costing performance measurement, and change control to provide management with real time decision making information
<ul style="list-style-type: none"> • Planning and Scheduling Benchmarks • Resource Constrained Project Scheduling • Revised May 20, 1995, p. 20. 	<ul style="list-style-type: none"> • This study promotes inclusion of the following functionality in scheduling systems: • Planning (Forecasting) • Scheduling and Prioritizing • Resource Loading (materials, manpower) • Ranking Systems • Insertion of New Work Capability • Updating

<ul style="list-style-type: none"> • Volvo Trucks • Marks & Spencer 	<p><i>This best practice promotes developing formulas to support decision making in scheduling.</i></p> <ul style="list-style-type: none"> • Develop scheduling options using algorithms, (i.e., establish rates and ranking for types of work, level of experience of staff, complexity of assignment, incorporate all rankings to develop a formula to develop scheduling options) • “Companies like Volvo Trucks and Marks & Spencer are using genetic algorithms that allow computers to "shuffle scheduling options as if they were strands of DNA." Using the algorithm in a program called OptiFlex, Volvo is able to evaluate possible solutions that have been ranked according to costs, labor constraints, material availability, and productivity. British retailer Marks & Spencer used the algorithm to assess customer credit by "evolving incremental improvements in its scoring formula." The Bios Group is exploring other possible applications of the genetic algorithm. Created as a partnership between Ernst & Young and professor Stuart Kauffman from the Santa Fe Institute, the Bios Group is looking at the algorithm to solve problems such as "how to price electric power in a auction market and how to model financial markets."
<ul style="list-style-type: none"> • Department of Energy 	<p><i>This best practice promotes the integration of supporting systems to maximize value of scheduling systems.</i></p> <p>Systems to be integrated include:</p> <ul style="list-style-type: none"> • Graphics • Tracking Systems • Milestones • Decision Support (What If) • Project Budget Spreadsheets • Cost Drivers and Cost Schedules • Graphic Scheduling. This module consists of two schedule trackers. The Shop Floor Specific Scheduler allows the craft person to interface with the project level Critical Path Schedule and is updated by the craft person. The project Critical Path Schedule provides the overall picture over many years for the craft persons and projects management; shows plus/minus schedule problems; and accommodates a what-if analysis. • Cost and Schedule Planning Document. This module allows personnel, from the shop floor to vice-president, to easily see budget outlays for a given project. This module is user friendly; consists of spreadsheets combined with graphics; and allows the user to see when costs will occur and what activities are driving the costs. • Cost and Schedule Reporting Document. This document is a modified Cost/Schedule Control Systems Criteria used to report Budget Cost to Work Schedule; Budget Cost to Work Performed; Actual Cost to Work Performed; variances; and budget at project completion. This report ties directly to the Cost and Schedule Planning Document.”

<ul style="list-style-type: none"> NASA Kennedy Space Center 	<p><i>This best practice describes detailed approaches to developing system capabilities and tools supporting planning and scheduling.</i></p> <ul style="list-style-type: none"> Use computer-aided process planning tools Development team with functional and technical users produced system after technology team developed initial program. Use constraint-based algorithms Include conflict resolution capabilities “Ground Processing Scheduling System” KSC developed the Ground Processing Scheduling System (GPSS), an artificial-intelligence-based, work-scheduling tool, as part of its Integrated Work Control System (IWCS). Currently being used in its development stage, GPSS is the primary scheduling tool for supplementing the existing computer-aided, process-planning tools of the Orbiter Processing Facility. A KSC development team produced the GPSS based on initial scheduling algorithms developed by NASA Ames Research Center. Influences on the complexity of the scheduling task include 24 major (most being in parallel) subsystems connected with the orbiter configuration and resource constraints associated with the supporting tasks, frequent rescheduling due to unexpected events, and the need to communicate schedule information in a timely manner. The development team used the Ames constraint-based algorithms to model the temporal, configuration, and resource constraints of each processing activity. These models then compare individual task schedules, resolve conflicts, and produce schedules, which contain minimal constraint violations. KSC has granted a license to a software development company, which has developed a commercial version of the program. The licensing rights are now nonexclusive, and KSC is interested in future licensing agreements with other interested commercial parties.” NOTE: License granted to Red Pepper Software, which was acquired by PeopleSoft in 1996.
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<ul style="list-style-type: none"> Harris Semiconductor 	<p><i>This best practice supports use of prioritized forecasts to drive production and measure performance.</i></p> <ul style="list-style-type: none"> Production is driven by plans from prioritized forecasts. “Manufacturing now builds to the IMPReSS plan that is derived from the prioritized demand forecasts supplied by product line marketing, and product lines have financial responsibility for the resulting inventory. Factories are now rated on performance against a centrally developed global production plan.”
<ul style="list-style-type: none"> Ultimus 	<ul style="list-style-type: none"> This company presents a list of the 100 most essential features for workflow automation. The list is categorized and has specific details describing the function of each feature. The list includes: Security features (i.e., user access, data) Server features (housekeeping) Client features Administrator features (views for costs, work load) Organization Chart features Designer features (routing, tracking, graphics)
<ul style="list-style-type: none"> Naval Avionics Center (Raytheon Technical Services Company) – Indianapolis, IN 	<p><i>This best practices presents experience with using Commercial Off The Shelf Scheduling packages versus developing applications in house.</i></p> <ul style="list-style-type: none"> COTS packages for control systems may be inflexible User friendly packages are recommended. A streamlined and user-friendly Cost and Schedule Control System has been developed. Because of the ease and effectiveness demonstrated by this system and the difficulty to use many of the pre-prepared control systems, the Navy approved experimental use of this system on the Seawolf Project with favorable results. The system has now been expanded for use on several other Navy projects
<ul style="list-style-type: none"> Harris Semiconductor 	<p><i>This best practice addresses the use of both functional and technical experts on the application development team.</i></p> <ul style="list-style-type: none"> “Software initially developed at the University of California, Berkeley in association with SRC has been adapted and further developed by Harris to incorporate specific factory models for each facility.”

<ul style="list-style-type: none"> ASME 	<ul style="list-style-type: none"> A Best Practice study conducted identified these team skills requirements: Project Management Budgeting Project Risk Analysis Design Reviews Information Processing Communication Sketching/Drawing Leadership Conflict Management Professional Ethics Teams and Teamwork
<ul style="list-style-type: none"> U.S. Army Combat Systems Test Activity (Aberdeen Test Center) – Aberdeen, MD 	<p><i>This best practice presents a process for developing and communicating forecasts for scheduling.</i></p> <ul style="list-style-type: none"> Both daily and weekly schedules by division are published. Forecasting drives the development of schedules Coordination with process managers develops forecasts. “Formal weekly and daily schedules based on monthly forecasts coordinated with the test directors are published for range firing, automotive, engineering support, and military personnel.”
<ul style="list-style-type: none"> Harris Semiconductor 	<p><i>This best practice promotes use of varied periodic planning reports to manage production.</i></p> <ul style="list-style-type: none"> Use long and short-term planning. Weekly reports provided to manage production “The 18-month planning horizon is updated weekly, and weekly product availability is supplied to the order entry system to provide interactive delivery quotes. Schedules are optimized by integrating prioritized demand data from marketing, product structure data from product engineering, work in process and inventory data from each factory, capacity models from each factory, and material availability data from purchasing”
<ul style="list-style-type: none"> US Web Corporation 	<p><i>This best practice promotes use of knowledge management tools to support effective resource management.</i></p> <ul style="list-style-type: none"> For example, using a skills database to maintain current experience and skills for more effective resource management. “US Web Central ‘s staff profiles is more than a simple competency map. By moving beyond mere skills or competency profiles, people are accessed by numerous factors that deepen their value within and to the organization.”
<ul style="list-style-type: none"> Naval Avionics Center (Raytheon Technical Services Company) – Indianapolis, IN 	<p><i>This best practice promotes development of systems that require less training and are user-friendly.</i></p> <ul style="list-style-type: none"> Using user-friendly systems reduces the need for training. Some systems are developed from COTS applications from popular user-friendly software packages.

	<ul style="list-style-type: none"> • “The Cost and Schedule Control System has been successful in practice on the Seawolf Project for over 18 months. Little training is required to use the system, which uses off-the-shelf EXCEL and MacDraw software.”
<ul style="list-style-type: none"> • U.S. Army Combat Systems Test Activity (Aberdeen Test Center) – Aberdeen, MD 	<p><i>This best practice addresses the cost/benefits associated with automation.</i></p> <ul style="list-style-type: none"> • Using fewer resources relates to operating at a lower cost supporting investing resources in developing this tool. • Data storage is more efficient and therefore over time will recoup any initial cost of acquiring supporting technology. • Costs of process decreases with centralization – fewer staff responsible for process equals reduced cost and creates opportunities to focus on other work. • “Benefits of automating this process over the previous handwritten system are increased accuracy and efficiency. Data storage has greatly improved, and most paper has been eliminated. The process facilitates communication and coordination, allowing more to be accomplished with fewer resources and at lower cost.”
<ul style="list-style-type: none"> • U.S. Army Combat Systems Test Activity (Aberdeen Test Center) – Aberdeen, MD 	<p><i>This best practice promotes centralizing process for effective management of resources and scheduling.</i></p> <ul style="list-style-type: none"> • Daily schedules are primary data used to manage resource distribution in a matrix organization. • Central Coordinating Unit owns scheduling process. • “CSTA has developed a centralized scheduling process under the ownership of its Resource Coordination Division (RCD). RCD produces monthly, weekly, and daily schedules that distribute resource requirements from a matrix organization of support groups in an optimal way to meet the needs of the test directors.”
<ul style="list-style-type: none"> • U.S. Army Combat Systems Test Activity (Aberdeen Test Center) – Aberdeen, MD 	<p><i>This best practice indicates cases where not all work was scheduled, and how the unscheduled work was integrated into the workload.</i></p> <ul style="list-style-type: none"> • In this case, all activities were not prioritized; the more unpredictable workload groups were not scheduled. • Those groups not scheduled were given priorities established by a centralized scheduling unit. • “Most scheduling requirements have now been centralized within RCD which schedules 80% of the support resources at CSTA. Those groups not directly scheduled are provided priorities by RCD. These are generally for services such as failure analysis and chemical laboratory services that are difficult to forecast”.

STRATEGY IV: Emphasize Knowledge Management by Developing an Automated, Centralized, Accessible Intranet	
BEST PRACTICE INDUSTRY	SUMMARY
<ul style="list-style-type: none"> World Class Insurance Company 	<ul style="list-style-type: none"> Extended Reports Distribution (ERD) system allows all reports to be viewed on-line by everyone
<ul style="list-style-type: none"> Large Government Contractor 	<ul style="list-style-type: none"> Information is readily available electronically throughout all levels of the organization through bulletin boards and email
<ul style="list-style-type: none"> Buckman Laboratories 	<ul style="list-style-type: none"> "Intranet" housed on CompuServe connects all members Linked to outside e-mail systems for communications with customers – serves as a technical forum Leadership champions the system Formal and "virtual" forums use company-wide expertise to solve problems
<ul style="list-style-type: none"> Chevron Corporation 	<ul style="list-style-type: none"> Best Practices Resource Map Best Practices Database Best Practices Teams Knowledge Centers
<ul style="list-style-type: none"> Dow Chemical Company 	<ul style="list-style-type: none"> Define the existing intellectual assets portfolio Classify the intellectual assets Is the business using it? Will the business use it? Incorporate into the business strategy How are assets being used? Where are the gaps in achieving business objectives? Invest to fill gaps Acquisition In-house development Add to existing portfolio
<ul style="list-style-type: none"> Hewlett-Packard: Product Processes Organization 	<ul style="list-style-type: none"> Leveraging best practices in "new product generation" Charting knowledge flows Pulling down barriers to collaboration Developing a collective view of the business
<ul style="list-style-type: none"> National Semiconductor 	<ul style="list-style-type: none"> Providing access to information: World Wide Web and Lotus Notes Increasing the value of information: "Faculty Clubs" Creating a collaborative knowledge community: "Interest Profiles," "Sharing Rallies"
<ul style="list-style-type: none"> Philip Morris 	<ul style="list-style-type: none"> Accelerating the transfer of key findings

	<ul style="list-style-type: none"> • Creating user-directed software applications • Establishing a common language using metaphors of community
<ul style="list-style-type: none"> • Skandia AFS 	<ul style="list-style-type: none"> • Recycling structural capital • Developing a set of intellectual capital indicators • Issuing a balanced intellectual capital annual report • Creating intellectual capital controllers
<ul style="list-style-type: none"> • VeriFone 	<p><i>This best practice explores the use of advances technology throughout the firm for knowledge sharing.</i></p> <ul style="list-style-type: none"> • Network is used to disseminate material such as employee files, office forms, budget information, purchase orders • Electronic training for new-hires • 100% accessible anywhere and anytime • Equips employees with portable computers and telecommunication devices
<ul style="list-style-type: none"> • Gensym 	<p><i>This best practice shows the use of tracking customer information and the importance for different levels of the organization.</i></p> <ul style="list-style-type: none"> • Established a help-desk that connects all aspects of its customers' world in one central electronic repository. • System is linked to a company wide database of customer information, ranging from support issues to development requests • Repository contains information as mundane as customer names and addresses, and as specific as solutions to common problems for various applications. • Tracks customer requests and monitors work flow so that outstanding customer requests and queries remain current until they are handled.
<ul style="list-style-type: none"> • GIT 	<p><i>This best practice shows the use of technology and the Internet to share information within the company and with its clients and shareholders.</i></p> <ul style="list-style-type: none"> • Technology links all members of the enterprise to one another and to all relevant external publics • Posts holdings of its four equity portfolios on Internet • Allows current and potential shareholders to follow GIT investment decision-making • Shareholders are offered a level of service not available to other mutual fund customers
<ul style="list-style-type: none"> • Incyte Pharmaceuticals 	<ul style="list-style-type: none"> • Technology links all members of the enterprise to one another and to all relevant external publics • Provides a proprietary database holding tens of thousands of gene sequences extracted from tissue libraries • Uses hypertext markup language that enables non-Incyte scientists to move from Incyte's database to related ones. Results in discoveries beyond the concept of the database's creators
<ul style="list-style-type: none"> • Arthur Andersen 	<ul style="list-style-type: none"> • Used technology to create an institutional memory that is accessible to the entire enterprise • Global Best Practices knowledge base saves time and money since professionals do not have to continually conduct the same research to address client problems
<ul style="list-style-type: none"> • Fiat 	<ul style="list-style-type: none"> • Used technology to create an institutional memory that is accessible to the entire enterprise • Establishing a memoria technica – an engineering knowledge bank • Spreads knowledge by accumulating it in specialist departments and then disseminating it to cross-

	functional design teams
<ul style="list-style-type: none"> Digital Knowledge Assets (DKA) – Chicago-based systems integrator 	<ul style="list-style-type: none"> Fosters development of “human-centered” information technology Uses GroupLens in its Information Environment to allow users to store items, such as Web pages or articles, in an object repository Users compile profiles for themselves through reading items and ranking their significance. Information is stored in the Information Environment so that when new information arrives, it issued to help route it to those who have given related items a high ranking.
<ul style="list-style-type: none"> Domino’s Pizza, Inc. 	<ul style="list-style-type: none"> Technology that supports collaboration is rapidly placed in the hands of employees Employs field managers to act as consultants and moderators between Dominos and its franchisees. Uses “IntellAgent Control” which allows for a high level of customization and aids in tracking requests and problems.
<ul style="list-style-type: none"> Rosenbluth International – travel service 	<ul style="list-style-type: none"> Created Global Distribution Network (GDN) to connect reservation agents across the globe with complete records of all its clients Automatically checks for lower fares until departure time and prompts for often-used words so that agents do not unnecessarily repeat typing while inputting information
<ul style="list-style-type: none"> Standard & Poor: Rating Information Services 	<p>Background:</p> <ul style="list-style-type: none"> Produces 400 different publications intended to help readers evaluate credit risks Documents were produced manually in an inefficient, time-consuming, and error prone manner Committee representatives from senior management, information technology, and production/editorial teams helped design and implement the new system Uses electronic document management software with work-flow capabilities to route document pages through the production process Solicited system design input from a wide variety of personnel
<ul style="list-style-type: none"> Borgess Medical Center 	<ul style="list-style-type: none"> Made documents available quickly to people who needed them Implemented an electronic document management system in its emergency department to speed the retrieval of patient information Doctors now have instant access to patient charts, lab and radiology reports, and EKGs, enabling them to begin treatment almost immediately

<ul style="list-style-type: none"> Hunt-Wesson Grocery Products Companies 	<p>Background:</p> <ul style="list-style-type: none"> Proposed changes were submitted on paper, then manually routed around the company for approval Process took as long as 60 days Limited company's ability to change its recipes and manufacturing processes during short growing and canning seasons Chose an electronic document management system with work-flow capabilities so that it could make faster changes to product recipes and manufacturing specifications <p>Improvements:</p> <ul style="list-style-type: none"> Proposed changes are submitted electronically and automatically routed to the appropriate people Approvals now take days instead of weeks
<ul style="list-style-type: none"> Dauphin Deposit Bank and Trust Company 	<p>Background:</p> <ul style="list-style-type: none"> Manual process relied on loan documentation specialists to evaluate each loan application to determine which supporting forms were required, then complete them using a typewriter or word processor Jeopardized the bank's ability to take control of loan collateral when documentation specialists chose the wrong forms Automated repetitive, paper-intensive processes <p>Improvements:</p> <ul style="list-style-type: none"> Used BPR to analyze the work-flow of the loan application process Helped management define the form selection process for each type of loan and account, resulting in standardized commercial loan procedures Procedures were incorporated into the document management software so that every type of loan application had corresponding, step-by-step instructions
<ul style="list-style-type: none"> Union Bank of California 	<p><i>This best practice emphasizes tracking and maintaining backup client information.</i></p> <ul style="list-style-type: none"> Ensured the security of documents in the system Has emergency data backup plan in place to protect its customer account information Inputs customer data to the system and information is automatically recorded on an on-line optical storage disk at Monterey Park Simultaneously, a duplicate copy of that data file is transmitted over the company's network to an off-site facility in San Diego, where it is indexed and archived to a redundant optical storage disk In case of earthquake, fire, etc., the bank can switch its network over to the contingency site
<ul style="list-style-type: none"> Shell U.K.'s Stanlow petrochemical plant 	<ul style="list-style-type: none"> Purchased electronic document management system to manage its plan engineering documents Designed a system that scans hard-copy engineering documents, indexes them, archives them, and makes them available for retrieval and viewing Comprehensive training program, coupled with on-site vendor consultants prepared employees to ensure the system operated efficiently

<ul style="list-style-type: none"> Jones, Day, Reavis & Pogue 	<p><i>This best practice focuses on the efficiency and importance of a company-wide electronic document handling system.</i></p> <ul style="list-style-type: none"> Organizes its documents in an efficient, enterprise-wide system that has 2 principal components: Work product management: work in progress documents related to current client representations; lawyers and administrative staff contribute documents to this part of the system on a daily basis Work product retrieval: finished documents, usually chosen from work product management by attorneys in the practice groups that serve as a body of precedent for others doing work in the future (considered the knowledge base) Committed to ongoing technological improvement Uses a combination of electronic document management software and groupware to organize its documents in an enterprise-wide system that enables employees to create, share, retain, reuse, and build on the knowledge that exists across departments and functional areas Committee of information systems specialists and partners meet quarterly to shape technological direction of the firm No decisions are made without soliciting the input of the intended users Continuous improvement resulted in moving to DOCS Open: includes Intranet, full text search, and workflow capabilities and facilitates a more seamless integration with Jones, Day's groupware application Uses a combination of system controls, internal procedures, and compliance audits to ensure that the documents in its system are accessed only by authorized personnel Heavily trains its employees to preserve the integrity of the system and promote efficient use Established help-desk for support
<ul style="list-style-type: none"> Global Best Practices: Manage Records and Documents 	<ul style="list-style-type: none"> Create a document classification scheme Organize documents in an efficient, enterprise-wide system Comply with all regulations affecting the company's documents Establish document management policies and procedures Adhere to a document retention and destruction schedule
<ul style="list-style-type: none"> TransCanada PipeLines Inc. 	<ul style="list-style-type: none"> Began standardizing and connecting department intranets creating a system called InfoNet which incorporated a product containing a document management system, a graphical workflow program, and internet-intranet indexing and searching tool, and a project collaboration system. The project collaboration system was an "electronic whiteboard" used to organize projects.

STRATEGY V: Shape Organizational Values and Beliefs Around Leveraging Knowledge and Resources for Continuous Improvement	
BEST PRACTICE INDUSTRY	SUMMARY
<ul style="list-style-type: none"> World Class Insurance Company 	<p><i>This best practice shows the change in beliefs and values associated with handling workloads.</i></p> <ul style="list-style-type: none"> The old mindset of redistributing work as being negative has changed. It used to be that giving up work to another part of the organization meant simply that your division could not handle the workload. The group that was able to absorb the workload was viewed as not having enough to do in the first place. Now, the division that gives up work is being viewed as being short handed and in need of assistance. The other group is viewed as having down-time or more resources and able to assist. The changes include: <ul style="list-style-type: none"> Decisions are made at the employee level and then brief superiors Corporate culture is strong and consists of: <ul style="list-style-type: none"> Services to members/customers Commitment to employees Mutual respect and trust Continuous learning and change OPD illustrates this organization's embrace of continuous improvement.
<ul style="list-style-type: none"> Large Government Contractor 	<ul style="list-style-type: none"> All costs are viewed as variable There is not a “use or lose” mentality, but a “give and take” mentality Leadership seeks to create an awareness of strategic goals and encourage employees to think “organization” as opposed to “job”. Management framework emphasizes consensus without politics and bureaucracy Fosters environment of fairness, where everyone has a voice and their opinion counts Believes in continuous improvement
<ul style="list-style-type: none"> Large Government Services Provider 	<ul style="list-style-type: none"> Management makes an effort to embed organizational mission into every employee's actions. Teamwork is valued and emphasized by management; teams and SDN team leaders are empowered to make decisions Working to encourage sharing workloads
<ul style="list-style-type: none"> Manufacturing Company A 	<ul style="list-style-type: none"> Structure evolves every 5 years Marries customer service, taking care of their people, understanding their workload Uses balanced scorecard for performance measurement Machine performance is prior to individual's performance, so there is little incentive to “game the system”
<ul style="list-style-type: none"> Autodesk, Inc. (USA) 	<p><i>This best practice shows the culture change of a focus, to a “Customers First” philosophy.</i></p> <ul style="list-style-type: none"> “For us, customer service is the priority, and that goes for customer service within our group, too,” said the Manager of the Computer Assistance Department at Autodesk, Inc. Invests in stress-reduction tactics for employees – spent more on indirect lighting, painted room soft yellow, and actively encouraged investment in intranet supported help.

	<ul style="list-style-type: none"> • Aligned goals of user support with the overall strategic goals of the company to be cost effective and efficient. • Assistance Center Manager can show executives that the investments in customer service saved the company money and improved workforce productivity, despite the increasing complexity of computing problems users report.
<ul style="list-style-type: none"> • Action Ware (formerly Appintec Corporation) – develops and markets workplace automation software 	<p><i>This best practice shows the importance of knowledge sharing.</i></p> <ul style="list-style-type: none"> • Married evolving technology to corporate business practices, procedures, and core values. • 1988-Built software to support its internal sales and marketing operations. Every piece of the firm's information, except for individual personal records, from sales leads to financial statements, became available to all employees. This open book sharing of information has remained viable because of the trust and discretion that has been imbedded in the culture
<ul style="list-style-type: none"> • Chesapeake Corporation 	<ul style="list-style-type: none"> • Each department is viewed as an “internal company” and is responsible for its own operations. The company's open book management provides employees with all the financial information they need to make decisions regarding operations and capital purchases and improvements
<ul style="list-style-type: none"> • USAir 	<ul style="list-style-type: none"> • Self-directed work team in a shop where airplane hydraulic systems are maintained asked for the replacement cost of every part it handled, information that no one thought these workers needed to know. • The new need-to-know approach, which gives information to mechanics whenever they require it, allows them to make informed decisions about overhauling versus purchasing. This access to information makes their own work more efficient, and also cuts company costs.
<ul style="list-style-type: none"> • Vance International 	<ul style="list-style-type: none"> • “When knowledge is not shared, disaster is not far behind” • Shares knowledge at every organizational level • Local Area Network (LAN) links computers stores ALL information and everyone has equal access.
<ul style="list-style-type: none"> • Altair Computing 	<p><i>This best practice focuses on identifying and developing a key relationship with the customer.</i></p> <ul style="list-style-type: none"> • Customer value creation is acknowledged as a major objective of knowledge management • Information sharing with customers is essential to successful product development • Company attempts to identify interested customers who are willing to co-invest to pursue a new technology • Tests results of R&D initiatives with customers
<ul style="list-style-type: none"> • Royal Bank of Canada 	<ul style="list-style-type: none"> • Created a comprehensive customer database and made it available online to all branches and offices enabling staff members to respond rapidly to loan requests • Spotlighted additional opportunities for the bank